Notice of Allowability	Application No.	Applicant(s)	
	09/675,257	GASTIGER ET AL.	
	Examiner	Art Unit	
	Kandasamy Thangavelu	2123	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *August 11, 2004*.

2. ☒ The allowed claim(s) is/are *1-29,44-48,52-55 and 3342*.

3. ☒ The drawings filed on *14 February 2001* are accepted by the Examiner.

4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☒ All b) ☐ Some* c) ☐ None of the:
      1. ☒ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

KEVIN J. TESKA
SUPERVISORY
PATENT EXAMINER

DETAILED ACTION

Introduction

1. This communication is in response to the Applicants' amendments dated August 11, 2004. Claims 9 and 24 were amended. Claims 30-32 and 49-51 were deleted. Claims 52-55 were added. Claims 1-29, 33-48 and 52-55 of the application are pending.

Examiner's Amendment

2. Authorization for this examiner's amendment was given in a telephone interview with Mr. William Hughet on October 15, 2004.

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

3. The application has been amended as follows:

In Claim 16, change:

"Process according to Claim 1, the database (6) consulted, or the database produced, furthermore comprising, for at least one or the apparatuses, data on the nature of a mixture with which that apparatus may be calibrated, and data on the frequency of calibration of the said apparatus."

to

--Process according to Claim 1, the database (6) consulted, or the database produced, furthermore comprising, for at least one of the apparatuses, data on the nature of a mixture with which that apparatus may be calibrated, and data on the frequency of calibration of the said apparatus.--.

In Claim 43, change:

Delete claim 43, it being a duplicate of claim 24.

In Claim 52, change:

"Computer program product, which, when executed by a computer, implements a process for producing a diagram of an installation using apparatuses, each apparatus being supplied with gas,"

to

-- Computer program product, comprising computer executable instructions which, when executed by a computer, implement a process for producing a diagram of an installation using apparatuses, each apparatus being supplied with gas, --.

In Claim 53, change:

"Computer-readable medium encoded with software for producing a diagram of an installation using apparatuses, each apparatus being supplied with gas, wherein the software is provided for:"

to

-- Computer-readable medium encoded with computer executable instructions, which, when executed by a computer, produce a diagram of an installation using apparatuses, each apparatus being supplied with gas, wherein the instructions are provided for:--.

In Claim 54, change:

"Computer program product, which, when executed by a computer, implements a process for producing a database comprising a set of data for the constitution of an installation using apparatuses, each apparatus being supplied with gas, wherein the database includes:"

to

-- Computer program product, comprising computer executable instructions which, when executed by a computer, implement a process for producing a database comprising a set of data for the constitution of an installation using apparatuses, each apparatus being supplied with gas, wherein the database includes:--.

In Claim 55, change:

"Computer-readable medium encoded with software for producing a database comprising a set of data for the constitution of an installation using apparatuses, each apparatus being supplied with gas, wherein the database includes:"

to

-- Computer-readable medium encoded with computer executable instructions, which, when executed by a computer, produce a database comprising a set of data for the constitution of an installation using apparatuses, each apparatus being supplied with gas, wherein the database includes:--.

Reasons for Allowance

4. Claims 1-29, 33-48 and 52-55 of the application are allowed over prior art of record.

5. The following is an Examiner's statement of reasons for the indication of allowable subject matter:

The closest prior art of record shows:

(1) an automated system and method for designing and editing a distribution system for a building; the distribution systems provide for movement and channeling of gases; the distribution systems include the duct work; the system coordinates the layouts of all the various distribution systems needed for a building, for their efficient operation and installation; information about the distribution system elements and various standard requirements is stored in a computer; information about the building elements including location of walls and other obstructions are entered into the computer; the computer program computes the layout needed for the distribution system; the quantity and location of the hangers needed to support the distribution system and other special fittings is calculated; the program can print a hard copy of the layout of the system; (**Normann et al.,** U. S. Patent 5,808,905);

(2) a system and method for supplying natural gas from a supply terminal to one or more user terminals; the natural gas demand varies from hour to hour and day to day significantly; the distribution system must be able to meet the varying demand and be reliable and cost efficient; the supply terminal is located at a dockside facility or on a pipeline connected to a natural gas field; the method analyzes the user terminals to determine the amount of natural gas required over a period of time and the expected fluctuations in demand; integrating this data with transport information and the type and kinds of transport equipment available, the quantity and flow rate of gas available at the supply terminal, a distribution plan is drawn (**Breise et al.,** U. S. Patent 4,380,242);

(3) a method of providing an inert atmosphere in a furnace for soldering of electronic components; the inert atmosphere is provided by delivering an inert gas through distribution lines and dispensing the inert gas through porous diffuser tubes in the heating chamber around the electronic components; the purity of the inert gas is controlled; flow control and pressure reduction apparatus are used in the line (**Jacobs et al.**, U. S. Patent 5,364,007); and

(4) a gas distribution network comprised of a high pressure gas reservoir and a low pressure delivery pipeline; control elements for controlling the temperature, pressure drop and flow of the compressed gas to the gas expander; a storage compressor delivers the compressed gas to the high pressure reservoir; (**Lundberg**, U. S. Patent application 2001/0003247)

5.1 Applicant's first set of claims consists of Claims 1, 6-8, 10, 14-18 and 35-37.

Independent Claim 1 is directed to a process for producing a diagram of an installation using apparatuses, each apparatus being supplied with gas. The claim identifies the uniquely distinct features of:

"the consultation of a database (5) for proposing, for each gas and each gas purity, a packaging, according the consumptions and the technical constraints relating to the storage of the gas and/or to their delivery".

The specification describes the selection of the packaging scheme on Page 22, Line 21 through Page 23, Line 5 and in Fig. 10I. The closest prior art fails to teach or fairly suggest the consultation of a database (5) for proposing, for each gas and each gas purity, a packaging,

according the consumptions and the technical constraints relating to the storage of the gas and/or to their delivery. Therefore, Claims 1, 6-8, 10, 14-18 and 35-37 are deemed novel and allowable.

5.2 Applicant's second set of claims consists of Claims 2-5, 9, 11-13, 33, 34 and 38-41.

Independent Claim 2 is directed to a process for producing a set of data for the constitution of an installation using apparatuses, each apparatus being supplied with gas, comprising the production of a database. The claim identifies the uniquely distinct features of:

"data relating to a packaging, for each gas and each gas purity, as a function of the consumptions of the apparatuses".

The specification describes the selection of the packaging scheme on Page 22, Line 21 through Page 23, Line 5 and in Fig. 10I. The closest prior art fails to teach or fairly suggest data relating to a packaging, for each gas and each gas purity, as a function of the consumptions of the apparatuses. Therefore, Claims 2-5, 9, 11-13, 33, 34 and 38-41 are deemed novel and allowable.

5.3 Applicant's third set of claims consists of Claim 19.

Independent Claim 19 is directed to a process for producing an installation using apparatuses. The claim identifies the uniquely distinct features of:

"the production of a diagram or a graphical representation of the installation, using a process according to Claim 1".

The closest prior art fails to teach or fairly suggest the production of a diagram or a graphical representation of the installation, using a process according to Claim 1. Therefore, Claim 19 is deemed novel and allowable.

5.4 Applicant's fourth set of claims consists of Claims 20 and 22-29.

Independent Claim 20 is directed to a device for producing a diagram of an installation using apparatuses, each apparatus being supplied with gas. The claim identifies the uniquely distinct features of:

"means (12, 14, 16, 31) for consulting the packaging database (5) in order to find in it, according to gas consumption data and technical constraints relating to the storage of the gas and/or to their delivery, a possible packaging".

The specification describes the selection of the packaging scheme on Page 22, Line 21 through Page 23, Line 5 and means for consulting the packaging database in Fig. 10I. The closest prior art fails to teach or fairly suggest means for consulting the packaging database in order to find in it, according to gas consumption data and technical constraints relating to the storage of the gas and/or to their delivery, a possible packaging. Therefore, Claims 20 and 22-29 are deemed novel and allowable.

5.5 Applicant's fifth set of claims consists of Claims 21, 42 and 44-48.

Independent Claim 21 is directed to a terminal device for producing a diagram of a gas installation, for a laboratory or a factory comprising at least one apparatus, each apparatus being supplied with gas. The claim identifies the uniquely distinct features of:

"- means of communication (12, 14, 16, 31) for establishing communication between the said terminal device and means (2) containing at least one database (4, 5, 6, 7) comprising, for each apparatus, data on the flow rate, the nature of the purity of the gas supplying the apparatus, and the supply pressure of that gas for that apparatus, and for transferring data from the said set of databases to the said terminal,

- means (30) for supplying the said terminal with user data for the said terminal, comprising at least one item of data on a used apparatus or identifying a used apparatus,

- means of storage (24, 26), in communication with the means for supplying the said terminal with user data, for storing these user data on an apparatus used by the user, together with data supplied by the database on the flow rate, the nature and the purity of the gas supplying that apparatus, and the supply pressure of that gas for that apparatus,

- means (22, 24) for calculating, or specially programmed for calculating, for each apparatus, the consumption or the limit consumption, according to the flow rate of the gas, and for calculating, for each gas and each gas purity, the total of the consumptions of all of the apparatuses used,

- means of display (29), in communication with the means of storage, for displaying at a least a portion of these data supplied by the database, and/or the total or totals of consumption calculated for each gas".

Because the closest prior art fails to teach or fairly suggest the above combination of the limitations for means for communication, storage, calculation and display as shown in Figs. 1, 2 and 10A through 10R and Page 24, Line 33 through Page 33, Line 19 of the specification, as claimed by the Applicants, Claims 21, 42 and 44-48 are deemed nonobvious and allowable..

5.6 Applicant's sixth set of claims consists of Claims 52 and 53.

Independent Claim 52 is directed to a computer program product, comprising computer executable instructions which, when executed by a computer, implement a process for producing a diagram of an installation using apparatuses, each apparatus being supplied with gas. Independent Claim 53 is directed to a computer-readable medium encoded with computer executable instructions, which, when executed by a computer, produce a diagram of an installation using apparatuses, each apparatus being supplied with gas. The claims identify the uniquely distinct features of:

"the consultation of a database (5) for proposing, for each gas and each gas purity, a packaging, according the consumptions and the technical constraints relating to the storage of the gas and/or to their delivery".

The specification describes the selection of the packaging scheme on Page 22, Line 21 through Page 23, Line 5 and in Fig. 10I. The closest prior art fails to teach or fairly suggest the consultation of a database (5) for proposing, for each gas and each gas purity, a packaging, according the consumptions and the technical constraints relating to the storage of the gas and/or to their delivery. Therefore, Claims 52 and 53 are deemed novel and allowable.

5.7 Applicant's seventh set of claims consists of Claims 54 and 55.

Independent Claim 54 is directed to a computer program product, comprising computer executable instructions which, when executed by a computer, implement a process for producing a database comprising a set of data for the constitution of an installation using apparatuses, each apparatus being supplied with gas. Independent Claim 55 is directed to a computer-readable medium encoded with computer executable instructions, which, when executed by a computer, produce a database comprising a set of data for the constitution of an installation using apparatuses, each apparatus being supplied with gas. The claims identify the uniquely distinct features of:

"data relating to a packaging, for each gas and each gas purity, as a function of the consumptions of the apparatuses".

The specification describes the selection of the packaging scheme on Page 22, Line 21 through Page 23, Line 5 and in Fig. 10I. The closest prior art fails to teach or fairly suggest data relating to a packaging, for each gas and each gas purity, as a function of the consumptions of the apparatuses and the technical constraints relating to the storage of the gas and/or to their delivery. Therefore, Claims 54 and 55 are deemed novel and allowable.

6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Kandasamy Thangavelu whose telephone number is 703-305-0043, till October 27, 2004 and 571-272-3717 after October 27, 2004. The examiner can normally be reached on Monday through Friday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Teska, can be reached on (703) 305-9704, till October 27, 2004 and 571-272-3716 after October 27, 2004. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-9600.

K. Thangavelu
Art Unit 2123
October 15, 2004